



6 March, 2014

Federal Communications Commission
445 12th Street SW,
Washington, DC 20554

Re: Connect America Fund - Docket 10-90

Letter of Interest

The Magnolia Road Internet Co-op, MRIC, would like to express its interest in the Rural Broadband Experiments for deploying robust, scalable broadband to eligible high-cost areas with the help of Connect America funding.

MRIC began when there were no viable commercial alternative such as DSL or commercial WISPs in the Rocky Mountains, Northwest of Denver. The early volunteers in 2001 and 2002 were frustrated telecommuters using satellite or ISDN who started the Internet Cooperative with under \$15K. Our current coverage map from the Colorado Office of Information Technology is attached hereto and shows the area we cover with 22 POP locations.

MRIC currently uses equipment in the unlicensed 2.4 and 5.7 spectrums. We are seeing more and more interference and competition for these spectrums and are looking at the Television White Space and licensed frequencies, but both are cost prohibitive. We deliberately decided not to provide IP-based phone service out of both reverse 911 and technology concerns. We would like to develop and implement a reliable emergency warning system with our network. If we could get fiber to our two current Network Operating Centers, we would have a more redundant and robust network for our members who rely on service for work, home schooling and emergency notification. We estimate \$50,000 per Network Operating System to get fiber to these locations.

MRIC has been able to expand into new locations that come to us asking if we can get service to their neighborhood. Only after getting neighbors together who are willing to put up the initial \$5,000 required to build a POP location are we able to do so. Once that is accomplished, we usually get many in the community to subscribe for service within 6 months and work to repay the initial investors. This process requires considerable time finding willing neighborhood investors and only allows us to gain about 1 or 2 POP location a year with about 25 households per POP. With new technology in the wireless industry and Connect America Funding we would be able to quickly expand into areas that need the services we can provide.

Magnolia Road Internet Cooperative PO Box 1671 Nederland CO 80466 720-210-1969



2 of the eligible census tracts are located just to the North of our current coverage area:

>> County	Tract ID	# of HCF Locations
>> Boulder	8013013601	16 3052.08
>> Boulder	8013013602	449 90883.77

These include the towns of Allenspark and Lyons, CO, which was declared a National Disaster Area after the historical flooding on Sep 11, 2013. I am a resident of Lyons and have been working with our Disaster Recovery Working Groups in regard to the Town's Communication Infrastructure. The Town of Lyons has looked at one plan to get Fiber to the town at an estimated initial cost of \$60,000. Having wireless redundancy is also a big need for the Town of Lyons, as well as our neighboring towns of Pinewood Springs, Allenspark, and Riverside. The flooding wiped out portions of physically networked infrastructure; including water, sewer, phone, electric and gas, and left the town as six stranded islands. All of these towns and the rugged Rocky Mountains in between could be covered by expanding the coverage area of the Magnolia Road Internet Co-op with approximately 25 to 35 new POP locations.

The Town of Lyons is looking at the acquisition and implementation of a multi-tiered Emergency Alert System, consisting of a reverse 911 program capable of sending recorded messages via phone calls, text messages and e-mails; a siren under the control of the town to alert residents in the event of an emergency; kiosks with an independent power source and wireless internet access; and an informational packet to be disbursed to current and new residents to educate residents on what to do in the event of an emergency.

MRIC could be working to provide redundancy and disaster preparedness with a number of Fire Protection Districts, including the Lyons Fire Protection District. We already provide broadband internet service to the Sugarloaf Fire Protection District, which serves a portion of unincorporated Boulder County.

MRIC has had a Mountain Community Fire Watch plan using smoke-sighting webcams to cover the Northern Front Range of Colorado, but lacks the funds to get it off the ground. We would work with the U.S. Forest Service and various Fire Protection Districts implementing cameras at our various locations and using servers to store data that delivers information to emergency personnel. We received praise from our members for our communication abilities during the 4 Mile Canyon Fire, West of Boulder in 2010, another National Disaster. For about \$1,000 per POP we could get a Mountain Community Fire Watch in place.

We are estimating around \$60,000 to get fiber to a new Network Operating Center in Lyons, CO. For 30 new POP locations throughout the Front Range of the Rocky Mountains, at \$5000 per location, we are looking at \$150,000. For webcams at 50 POP locations at \$1,000 a unit we estimate \$50,000. For fiber runs to our 2 current Network Operating Systems we estimate \$100,00. We are looking at total investment of \$360,000 over the next 3 to 5 years if we were to

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fund all of these projects. The Magnolia Road Internet Co-op would love to have this opportunity to truly make a difference to our community, our state and the United States of America.

Thank You,

Aaron Caplan

Director

Magnolia Road Internet Co-op

Attachment: Colorado Office of Information Technology Current Coverage Map

- Middle Mile Locations
- ▭ County Boundaries
- Major Roads
- Local Roads

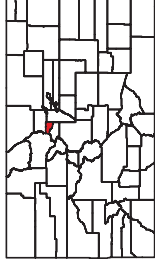
Maximum Downstream Speed

- 768 kbps to 1.5 mbps
- 1.5 mbps to 3 mbps
- 3 mbps to 6 mbps
- 6 mbps to 10 mbps
- 10 mbps to 25 mbps



Magnolia Wireless Coverage Area

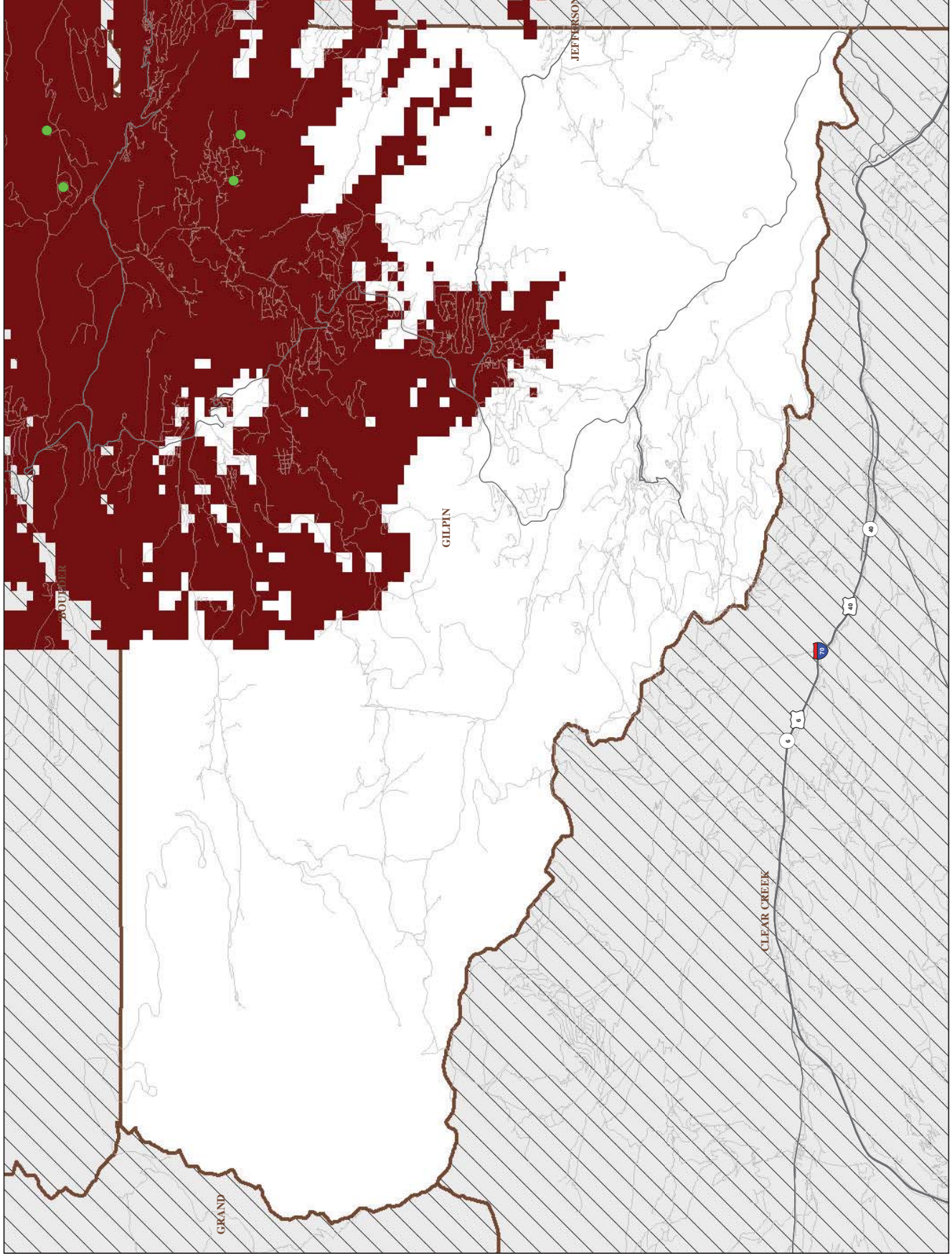
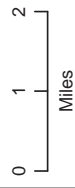
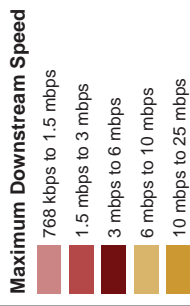
Gilpin County



Legend

- Middle Mile Locations
- County Boundaries
- Major Roads
- Local Roads

Wireless Coverage Area



Magnolia Wireless Coverage Area

Jefferson County



Legend

Middle Mile Locations

County Boundaries

Major Roads

Local Roads

Wireless Coverage Area

Maximum Downstream Speed

768 kbps to 1.5 mbps

1.5 mbps to 3 mbps

3 mbps to 6 mbps

6 mbps to 10 mbps

10 mbps to 25 mbps

